



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,066	07/25/2003	James R. Downing	HDI 4.1-1	2223
21036	7590	06/01/2005	EXAMINER	
MCLEOD & MOYNE, P.C. 2190 COMMONS PARKWAY OKEMOS, MI 48864			BRITTAINE, JAMES R	
			ART UNIT	PAPER NUMBER
			3677	

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/627,066	DOWNING ET AL.	
	Examiner	Art Unit	
	James R. Brittain	3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 28 February 2005.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-16 and 27 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) 27 is/are allowed.

6) Claim(s) 1,3,4,7-12 and 14-16 is/are rejected.

7) Claim(s) 2,5,6 and 13 is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. _____.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) Notice of Informal Patent Application (PTO-152)

6) Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 8-10, 14 and 15 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kintzi et al. (US 6813782) in view of England (US 988558) and Sawyer (US 3925822).

Kintzi et al. (figures 3, 4) teaches an attachment device for connecting a head and neck support device to a helmet via a strap, which comprises a readily attachable and detachable connection 50, 60, 70 to a helmet (col. 12, lines 6-42). The difference is that the connection lacks:

- (a) a base having a front surface with an opening and a back surface with an opening extending therebetween for positioning on the helmet with the back surface of the base adjacent an outer surface of the helmet and the opening of the base aligned with a hole in the helmet;
- (b) a button having an opening and positioned in the indentation of the front surface of the base with the opening of the button aligned with the opening of the base wherein when the button is depressed, the button moves into the indentation of the base;
- (c) a resilient member positioned between the front surface of the base and the button for biasing the button in a direction away from the base;

(d) a post having opposed first and second ends with a head at the first end for positioning through the openings of the button and the base and the hole in the helmet so that the second end of the post is adjacent an inner surface of the helmet;

(e) a retainer for mounting on the second end of the post adjacent the inner surface of the helmet for securing the post in position in the hole in the helmet; and

(f) a catch for connecting to the head and neck support device and having an opening for connecting to the head of the post by positioning the head of the post through the opening.

However, England (figures 1-4) teaches an attachment device for securing protective curtains but usable for many applications to provide a readily attachable and detachable connection (page 1, lines 9-16), which comprises:

(a) a base 24 having a front surface and a back surface with an opening extending therebetween inherently capable of being positioned on a helmet with the back surface of the base adjacent an outer surface of the helmet and the opening of the base aligned with a hole in the helmet;

(b) a button 25 having an opening and positioned adjacent the front surface of the base with the opening of the button aligned with the opening of the base;

(c) a resilient member 26 positioned between the front surface of the base and the button for biasing the button in a direction away from the base;

(d) a post 12, 13 having opposed first and second ends with a head at the first end for positioning through the openings of the button and the base and fully capable of inherently into the hole in the helmet so that the second end of the post is adjacent an inner surface of the helmet; and

(e) a catch 14 for connecting to the head and neck support device and having an opening for connecting to the head of the post by positioning the head of the post through the opening.

England teaches a fastener wherein the base fits within a recess in the button, the reverse of what applicant claims. However, the key teaching is that the provision of the recess in one structure, the button, permits the other structure, the base, to move therein and to protect the spring from the elements and abrasion.

Sawyer (figures 1, 5) teaches that it is desirable to position a retainer 14 inside an opening in a helmet to receive a threaded shank so as to more easily and better unite the threaded shank to a substrate wherein the retainer functions to by having a size greater than the hole in the helmet and threadedly engages the threaded shank.

As it would be beneficial to modify the connection of Kintzi et al. so as to be readily attachable and detachable and to more easily mount the device upon a helmet by utilizing a threaded retainer from inside the helmet, it would have been obvious to modify the teachings of Kintzi et al. so as to utilize the base, button, spring and catch of England and the retainer of Sawyer and to further reverse the position of the recess from that shown by the button and base in the fastener of England so that the recess is in the base to receive the button as this is but the reversal of parts so as to perform the same sliding function while still protecting the spring from the elements and abrasion and there is no further distinguishing structure claimed between the button and base. The reversal of parts would have been obvious, *In re Gazda*, 219 F.2d 449, 104 USPQ 400 (CCPA 1955).

England is the key reference that discloses the fastener itself. The catch 14 has the keyhole shape 20, 21 that engages a connector section adjacent the head and wherein the

connector section has a size less than the size of the head and thereby suggests the structure of claims 3 and 8-10.

Claims 4, 7, 11 and 12 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kintzi et al. (US 6813782) in view of England (US 988558) and Sawyer (US 3925822) as applied to claims 3 and 8 above, and further in view of Takada (US 3885811).

Further modification of the device of Kintzi et al. as modified by England such that the fastener of England has parallel flat sections upon the post that alternate with curved sections so as to pass through parallel edges of the hole in the catch would have been obvious in view of Takada (figures 2, 5, 6) in which the post 10' has such structure to cooperate with the edges 5 of the opening so as to require alignment for passage of the post through the sections of the opening, a beneficial safeguard.

Claim 16 is rejected under 35 U.S.C. §103(a) as being unpatentable over Kintzi et al. (US 6813782) in view of England (US 988558) and Sawyer (US 3925822) as applied to claim 15 above, and further in view of Puckett (US 3928896).

Further modification of the device of Kintzi et al. as modified by England and Sawyer such that the retainer is similar in size to the back surface of the base would have been obvious in view of Puckett (figures 1a-1c) wherein the base 14 is sized similar to the retainer 14 for easier assembly and equal distribution of stress upon the opposite sides of the substrate.

Allowable Subject Matter

Claims 2, 5, 6 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 27 is allowed.

Response to Arguments

Applicant's arguments filed February 28, 2005 have been fully considered but they are not persuasive. Applicant argues that the key reference of England fails to show or suggest the use of a base having an indentation. While the device of England does not show the base having an indentation within which the button is received, it does show the reverse wherein the button has a recess to receive the base. It performs the same function of protecting the spring and permitting the telescopic reception of one part within the other. The reversal of these two parts so that the recess is in the base is the only claimed difference and the reversal of parts is within the skill of the art *In re Gazda*, 219 F.2d 449, 104 USPQ 400 (CCPA 1955). Applicant argues that the fastener of England is countersunk within the supporting structure and that this renders the claimed subject matter non-obvious as there would be no need to mount the base on the outside surface. This is not at all persuasive because the countersunk area is part of the outer surface and there is nothing in the claim language prohibiting such an interpretation. The fastener of England has a base and all that is required is reversing the telescopic action between the side walls of the base and button so that the side walls of the button are received within the side walls of the base and this is obvious as a reversal of parts.

Applicant's arguments with respect to the further rejections that incorporate the added references of Takada or Puckett address the issue of the base having a recess, which is relative to claim 1 as argued by applicant with respect to England, and it is the position in this action that given the teachings of England are sufficient to reverse the telescopic action of the button and base.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James R. Brittain whose telephone number is (571) 272-7065. The examiner can normally be reached on M-F 5:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on (571) 272-7075. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

Art Unit: 3677

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



James R. Brittain
Primary Examiner
Art Unit 3677

JRB